

Amendments to the Claims:

1-6. (canceled)

7. (currently amended) A heat shield for guiding a hot gas, comprising:  
a support structure having an inlet channel for a coolant flow;  
a plurality of heat shield elements mounted to the support structure, each heat shield having a hot gas wall in contact with the hot gas and a plurality of side walls which extend from the hot gas wall toward the supporting structure to form an internal space that receives the coolant flow;  
a plurality of cooling gaps formed by spaces between adjacent heat shields;  
a sealing element which provides mechanical damping that is arranged between the supporting structure and the side walls, said side walls and said supporting structure being connected through the sealing element, said side walls not being in direct contact with said supporting structure; and  
a coolant discharge channel to allow the controlled flow of the coolant from the internal space to the cooling gaps, said coolant discharge channel being oriented at an oblique angle to direct the coolant in a direction of the hot gas wall.

8. (previously presented) The heat shield structure as claimed in claim 7, wherein the internal space side of the hot gas wall is cooled by impact cooling.

9. (previously presented) The heat shield structure as claimed in claim 8, wherein the supporting structure contains a plurality of inlet channels.

10. (previously presented) The heat shield structure as claimed in claim 9, wherein the heat shield element comprises a metal or a metal alloy.

11. (previously presented) The heat shield structure as claimed in claim 10, wherein the heat shield element is selected from the group of superalloy based materials consisting of iron, chromium, nickel and cobalt.

12. (previously presented) The heat shield structure as claimed in claim 11, wherein the heat shield is formed by a cast process.

13. (previously presented) The heat shield structure as claimed in claim 12, wherein the coolant discharge channel is formed in the side wall of the heat shield.

14. (previously presented) The heat shield structure as claimed in claim 12, wherein the coolant discharge channel is formed in the supporting structure.

15. (currently amended) A combustion chamber for a gas turbine engine, comprising:  
a burner through which a hot gas flows; and  
a heat shield structure located downstream of the burner and attached to an interior wall of the combustion chamber for guiding the hot gas flow, comprising:

a support structure having a plurality of inlet channels that provides an impact cooling flow;

a plurality of temperature resistant cast superalloy elements secured to the support structure, the temperature resistant elements have a surface in contact with the hot gas and a plurality of side walls which extend from the surface toward the support structure to form an internal region which directly receives the impact coolant flow;

a plurality of cooling gaps formed by spaces between adjacent heat shields;

a sealing element arranged between the supporting structure and the side walls that inhibits leakage of the coolant flow and damps the heat shield structure in order to inhibit vibration induced by the hot gas flow; and

a coolant flow discharge channel sized and configured to limit the coolant flow from the internal region to the cooling gaps, said coolant discharge channel being oriented at an oblique angle to direct the coolant in a direction of the hot gas wall:-

wherein said side walls and said supporting structure are connected through the sealing element, and said side walls are not in direct contact with said supporting structure.

16. (previously presented) The combustion chamber as claimed in claim 15, wherein the superalloy base is selected from the group consisting of iron, chromium, nickel and cobalt.

17. (previously presented) The combustion chamber as claimed in claim 15, wherein all of the temperature resistant elements have a surface in contact with the hot gas.

18. (previously presented) The combustion chamber as claimed in claim 15, wherein the coolant discharge channel is formed in the side wall of the temperature resistant element.

19. (previously presented) The combustion chamber as claimed in claim 15, wherein the coolant discharge channel is formed in the support structure.

20. (currently amended) A gas turbine engine, comprising:

a compressor that provides a compressed air flow;  
a turbine arranged downstream of the compressor; and  
a combustion chamber having:

a support structure with a plurality of inlet channels that provides an impact coolant flow;

a plurality of temperature resistant cast superalloy elements secured to the support structure, the temperature resistant elements have a surface in contact with the hot gas and a plurality of side walls which extend from the surface toward the support structure to form an internal region which directly receives the impact coolant flow;

a plurality of cooling gaps formed by spaces between adjacent heat shields;  
a sealing element arranged between the supporting structure and the side walls that inhibits leakage of the coolant flow and damps the heat shield structure; and

a coolant flow discharge channel sized and configured to limit the coolant flow from the internal region to the cooling gaps, said coolant discharge channel being oriented at an oblique angle to direct the coolant in a direction of the hot gas wall:-

wherein said side walls and said supporting structure are connected through the sealing element, and said side walls are not in direct contact with said supporting structure.

21. (previously presented) The gas turbine engine as claimed in claim 20, wherein the superalloy base is selected from the group consisting of iron, chromium, nickel and cobalt.

22. (previously presented) The combustion chamber as claimed in claim 20, wherein all of the temperature resistant elements have a surface in contact with the hot gas.

23. (previously presented) The combustion chamber as claimed in claim 20, wherein the coolant discharge channel is formed in the side wall of the temperature resistant element.

24. (previously presented) The combustion chamber as claimed in claim 20, wherein the coolant discharge channel is formed in the support structure.